**CURRICULUM VITAE**

Chia (George) Hsu, Ph.D.

8/8/2023

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**DATE of BIRTH:** July 8th, 1979 **CITIZENSHIP:** Taiwan

**PRONOUNS:** Male

**CURRENT POSITIONS**

Assistant Professor – Department of Kinesiology, 08/2023-Present

University of Texas at San Antonio, San Antonio, Texas, USA

Adjunct Assistant Professor – Department of Medicine, 08/2023-Present

University of Rochester Medical Center, Rochester, New York, USA

**EDUCATION**

2010 - 2016 Ph.D., Applied Physiology. Georgia Institute of Technology, Atlanta, USA

2001 - 2004 MS, Exercise Science. National Taiwan Sport University, Taoyuan, Taiwan

1997 - 2001 BS, Chemistry. National Cheng Kung University, Tainan, Taiwan

**POST-DEGREE TRAINING**

2022 - 2023 Research Assistant Professor / University of Rochester, Rochester NY

2017 - 2022 Postdoc / Inflammation / University of Rochester, Rochester NY

2016 - 2017 Postdoc / Orthopaedics / University of Rochester, Rochester NY

**PROFESSIONAL NON-ACADEMIC EMPLOYMENT HISTORY**

2004 - 2009 Research Scientist, Olympic Training Center, Kaohsiung, Taiwan

2003 - 2004 Sports Nutrition Consultant, EAS Supplement (Powerhouse), Taipei, Taiwan

2002 - 2003 Personal Trainer, 24-Hour Fitness, Taipei, Taiwan

**HONORS AND AWARDS**

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| 2021 | Southeast Toxicology Annual Meeting, 1st place, Platform Award, USA |
| 2021 | Postdoc day / Poster competition, 2 nd place, University of Rochester, USA |
| 2020 | Northeast Toxicology Annual Meeting, 1st place, Poster Award, USA |
| 2019 - 2022 | New York State Department of Health Postdoctoral Fellowship, USA |
| 2018 | University of Rochester Postdoctoral award in Interdisciplinary Research, USA |
| 2010 - 2013 | Graduate Scholarship, Ministry of Education, Taiwan |
| 1997 - 2001 | Undergraduate Full Scholarship, National Cheng Kung University, Taiwan |

**ACADEMIC & PROFESSIONAL ORGANIZATIONS**

2019 - Present Society of Toxicology

2017 - Present American Heart Association

2017 - 2019 National Strength and Conditioning Association

2011 - 2017 American Physiology Society

2009 - 2016 American College of Sports Medicine

**EDUCATIONAL CONTRIBUTIONS**

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| 2020 - 2023 | Undergraduate and graduate mentor at Berk lab, University of Rochester, USA  Responsibility: Work closely with students to design and perform experiments.  Students : Camila Lage Chávez (Biology), Tony Gao (Medical Stduent) |
| 2015 - 2016 | Undergraduate mentor at Burkholder lab, Georgia Institute of Technology, USA  Responsibility: Work closely with students to design and perform experiments.  Students : Michael Mallow (Biology), and Matthew Mosgrove (Biomedical Engineering) |
| 2013 - 2016 | Teaching Assistant, Georgia Institute of Technology, USA  Responsibility: Lecture and supervise students in class, grading assignments and calculating grades. |
| 2009 | World Games, Kaohsiung, Taiwan  Responsibility: Teach sports nutrition, perform body composition testing, and develop comprehensive recovery programs for bodybuilding, karate, rugby sevens, and tug-of- war teams. |
| 2008 | Olympic Games, Beijing, China  Responsibility: Provide anti-doping education, perform aerobic and muscular fitness testing, and develop comprehensive training programs for taekwondo, weightlifting, baseball, tennis, and swimming teams. |
| 2006 | Asian Games, Doha, Qatar  Responsibility: Measure molecular, endocrine, and immunological biomarkers following various training or nutritional interventions for badminton, judo, weightlifting, archery, sport climbing, and boxing teams. |

**PRESENTATIONS**

**Local, Regional, & State Conferences**

2022 Poster - Immune Imaging Symposium - Cornell University, NY, USA

2022 Poster - Wilmot Cancer Institute Scientific Symposium, Rochester, NY, USA

2022 Poster - Genetics Day, Rochester, NY, USA

2021 Talk - Southeastern Society of Toxicology annual meeting, Virtual

2020 Poster - Northeast Society of Toxicology annual meeting, Virtual

2018 Poster - University of Rochester Hinkle Symposium, NY, USA

**National & International Conferences**

2022 Poster - GRC Immunometabolism in Health and Disease, RI, USA

2022 Poster - Society of Toxicology annual meeting, San Diego, CA, USA

2021 Talk - Innate Immunity: Mechanisms and Modulation, Virtual

2020 Poster - SOT annual meeting, Virtual

2019 Poster - ATVB annual meeting, Boston, MA, USA

2016 Poster - Muscle Biology Conference, Gainesville, FL, USA

2014 Poster - ACSM Conference on Integrative Physiology of Exercise-Miami, FL, USA

2013 Poster - Experimental Biology-Boston, MA, USA

**Invited Presentations:**

2016 Molecular and cellular mechanisms of muscle hypertrophy- Georgia Tech, GA, USA

2015 Fitness and weight management- Georgia Tech, GA, USA

2014 Fitness and weight management- Georgia Tech, GA, USA

2008 Strength training and supplementation- Chinese Taipei Powerlifting Federation, Taipei,

Taiwan

2008 Making weight for Judo athletes- Chinese Taipei Judo Federation, Taipei, Taiwan

2008 Making weight for weightlifting athletes- Chinese Taipei Weightlifting Federation, Taipei,

Taiwan

2007 The application of vibrational training-Taiwan Physical Therapy Association, Kaohsiung,

Taiwan

2004 Sports nutrition and supplementation-EAS sports nutrition, Taipei, Taiwan

**EDITORIAL ASSIGNMENTS IN PROFESSIONAL JOURNALS**

Journal Reviewer for:

1. International Journal of Inflammation

2. Neural Regeneration Research

3. Circulation (Assist Dr. Berk)

4. Circulation Research (Assist Dr. Berk)

5. Journal of Clinical Investigation (Assist Dr. Berk)

**Grants**

Previous:

Grant: The role of phosphodiesterase 10A in inflammation after spinal cord injury.

Role: Postdoctoral Fellow

Supporting Agency: New York State Spinal Cord Injury Research Board, USA

Duration: 2019 - 2022

Total Dollars: $189,366

Active:

Grant: PDE10A treatment for neuropathic pain after spinal cord injury

Role: Co-Investigator

Supporting Agency: New York State Spinal Cord Injury Research Board (SCIRB)

Duration: 2023 - 2025

Total Dollars: $340,628

Pending:

Grant: Exercise training enhances the resolution of inflammation after sciatic nerve injury

Role: Principal Investigator

Supporting Agency: Department of Defense

Duration: 2023 - 2025

Total Dollars: $307,760

**PUBLICATIONS**

**Peer-Reviewed Journal Articles**

1. **Hsu CG,** Li WJ, Chavez CL, Zhang C, Sowden M, Berk BC. Pnpt1 mediates NLRP3

inflammasome activation by MAVS and metabolic reprogramming in macrophages. 2023. *Cell*

*Mol Immunol.* **(IF: 24.1),** 20(2):131-142.

2. **Hsu CG**, Chavez CL, Zhang C, Sowden M, Yan C, Berk BC. The lipid peroxidation product 4-

hydroxynonenal inhibits NLRP3 inflammasome activation and macrophage pyroptosis. *Cell*

*Death Differ.* **(IF: 13.3)** 2022, 29(9), 1790-1803.

3. Luo L, Yujun Cai, Zhang Y, **Hsu CG**, Korshunov VA, Long X, Knight PA, Berk BC, Yan C: Role of

PDE10A in vascular smooth muscle cell hyperplasia and pathological vascular remodeling. *Cardiovasc Res* **(IF: 13.081 )** 2021, 118(12), 2703-2717.

4. **Hsu CG**, Fazal F, Rahman A, Berk BC, Yan C: Phosphodiesterase 10A Is a Key Mediator of Lung

Inflammation. *J Immunol* (IF: 6.173) 2021, 206:3010-20.

5. Zhang C, **Hsu CG**, Mohan A, Shi H, Li D, Yan C: Vinpocetine protects against the development of

experimental abdominal aortic aneurysms. *Clin Sci* (Lond) **(IF: 6.876)** 2020, 134:2959-76.

6. **Hsu CG**, Talukder MAH, Yue L, Turpin LC, Noble M, Elfar JC: Human equivalent dose of oral 4-

aminopyridine differentiates nerve crush injury from transection injury and improves post-injury function in mice. *Neural regeneration research* **(IF: 6.1)** 2020, 15:2098-107.

7. Clark AR, **Hsu CG**, Talukder MAH, Noble M, Elfar JC: Transdermal delivery of 4-aminopyridine

accelerates motor functional recovery and improves nerve morphology following sciatic nerve crush injury in mice. *Neural regeneration research* **(IF: 6.1)** 2020, 15:136-44. (Co-first author)

8. **Hsu CG**, Burkholder TJ: Independent AMP and NAD signaling regulates C2C12 differentiation and

metabolic adaptation. *J Physiol Biochem* **(IF: 5.08)** 2016, 72:689-97.

9. **Hsu CG**, Burkholder TJ: Activation of p38 in C2C12 myotubes following ATP depletion depends

on extracellular glucose. *J Physiol Biochem* **(IF: 5.08)** 2015, 71:253-65.

10. Chien KY, Chen TT, **Hsu J**, Pan RN, Li JH, Kuo CH, Hsu MC: Sub-maximal exercise altered the

prednisolone absorption pattern. *J Pharm Pharm Sci* **(IF: 3.34)** 2010, 13:58-66.

11. **Hsu C.** The misuse of performance-enhancing substances in sport. Sports Medicine Association

(Chinese). 2008; 2(4).

12. **Hsu C.**, LIN Y. Elite Athletes' Training Monitoring and Sport Science Case Study Report. *National*

*Sports Quarterly (Chinese)*. 2006; 35(3):73-76.

13. **Hsu C.**, Hsu MC. Efficacy and safety of ephedra for weight loss and athletic performance. *The*

*University Physical Education & Sports (Chinese)*. 2005; 76:205-209.

14. **Hsu C.**, Wang S. Effect of Whole Body Vibration training on muscle strength and power.

*Republic of China Physical Education Journal (Chinese)*. 2005; 20:40-47.

15. **Hsu C.**, Hsu MC. Effect of Carbohydrate-Protein Supplement Intake on Glycogen Synthesis after

Exercise. *National Taiwan Sport University Repository (Chinese)*. 2004; 15(1):107-114.